

Nutrition Lesson 1:

Fuel for Canoeing the River

OVERVIEW OF LESSON 1 IN NUTRITION – Lewis and Clark began an expedition to discover the Western half of the United States in 1804. In this first lesson, students will embark on an expedition to learn that food they eat at breakfast helps give them energy to go all day long.

Objectives

Students will:

- Learn how food fuels the body and mind.
- Learn the benefits of eating breakfast.

Time Needed

1 hour

Getting Ready

Read: This lesson plan. Also the enclosed Dietary Guidelines booklet and brochure for basic nutrition information.

Duplicate: The handouts for this lesson:

Student Handouts: What D'Ya Know?; Breakfast Bonanza handouts (4); Family Breakfasts for Everyone

Parent Handouts: Lewis and Clark Fitness Challenge – Aim for Fitness and Sound Bytes to Help You Aim for Fitness;

Staff Handout: Five Steps to a Healthy Weight: Family Fun, Food and Fitness

Technology Link: Meals for You at <http://www.mealsforyou.com/>

This site is packed with quick mealtime solutions for any family, including yummy new breakfast ideas. You can search hundreds of recipes by ingredients, time and special dietary concerns. Every recipe includes nutrition information and can be adapted to the number of servings you need.

Lunchroom Link: If your school has a School Breakfast Program, work with the school nutrition director to design and implement a campaign to promote the School Breakfast Program throughout the community. Arrange with a local radio station to announce the menu for the school breakfast every morning; get menus printed in the local newspaper each Sunday; design posters to display in the library, post office or other community gathering centers.

Plan a special event and encourage parents, grandparents or other family members to join students for school breakfast. Have adults act as "guest servers" and eat Breakfast Parfaits (yogurt layered with fruits and granola) and whole grain bagels.

If your school doesn't have a School Breakfast Program, plan a class party and enjoy breakfast together. Plan a menu that Lewis and Clark would have had along the trail such as fresh and dried fruits, "flapjacks" (pancakes) and meat.

Nutrition Lesson 1: Fuel for Canoeing the River

Activity Steps

1. Breakfast Basics

Have students read and complete the "What D'Ya Know?" handout at the back of this lesson. Then ask the students why it is or isn't important to eat breakfast every morning. Possible answers might be:

- It is important so I won't get hungry before lunch.
- It is important to give me energy to start my day.
- It isn't important because my parents don't eat breakfast.

Discuss the students' answers, then ask if anyone can explain what fasting means. Discuss the answers, then explain that fasting essentially means going for long periods without any food. The word "breakfast" means exactly what it says - break the fast. It's the meal that breaks a long night without any food.

Breakfast would have been a very important meal for Lewis and Clark to start them off with lots of energy for their very physical days. In fact, if they had not eaten breakfast, the expedition would not have had enough energy to work as hard as they did all day long. Discuss journal entries that tell what it was like for the expedition when they had to go without food (such as during the winters or when food was scarce) - more sickness, tiredness, etc.

Even though some people don't start their day with breakfast, we know those who do eat breakfast feel better and have more energy to work and play. That means they do better in school and sports!

Explain that a healthy breakfast gives a better start to your day. At a minimum, a healthy breakfast includes foods from the Bread & Cereal group, the Fruit or Vegetable group and the Milk group (refer to a food guide poster if needed. The food groups will be discussed in detail in Lesson 2).

Ask the students to raise their hands and when called on, name their favorite breakfast. Write at least four different breakfasts on the board. Then ask the students to raise their hands again and when called on this time, name a food that they think Lewis and Clark may have eaten for breakfast on the expedition. Have students compare the differences between what they eat now with what the expedition ate.

2. Better Breakfasts

Distribute the "Family Breakfasts for Everyone" handout at the back of this lesson the night before it is to be used in class. Ask students to take it home and schedule a time to interview an adult family member with whom they live. Then the next day in class, discuss the following questions based on their completed handouts:

1. How and why has the breakfast of the adult you interviewed changed since he/she was a kid? (Maybe breakfasts were larger, people ate more eggs/bacon/meat, the whole family ate breakfast together. Explain that several things would affect how breakfasts have changed over the years such as more women working outside the home, which has led to simpler breakfasts since mornings are so hectic. And since people know more about nutrition now, they don't eat as many high-fat breakfasts like bacon and eggs.)
2. Have the foods changed that you liked to eat when you were little? Why or why not? (Possible answers could be: I like more foods now than I did when I was little. I help make my breakfast now so I get to choose what I eat. I'm busier now, so I go for foods that are quicker to eat so I can get out of the house faster in the morning.
3. Give some of the reasons why the adult you interviewed thinks your family's breakfasts are or are not healthy. (Maybe they don't overeat - they keep it simple. They eat lots of fiber.)
4. Ask the students to help each other think of ideas that could make some of the "unhealthier" breakfasts healthier.
5. If time permits, plan a "break the fast" party where everyone eats the school breakfast for a week. Or work with the Food Service Director at your school to plan a classroom breakfast and enjoy a meal together.

Nutrition Lesson 2:

"Eating" the Pyramid

OVERVIEW OF LESSON 2 IN NUTRITION - This lesson teaches students the importance of a balanced diet while teaching about the Food Guide Pyramid and serving sizes. Students will discuss foods eaten on the expedition and where those foods fit into the Pyramid to find out if Lewis and Clark "ate the Pyramid."

Objectives

Students will:

- Learn about the Food Guide Pyramid and how foods from the expedition fit into it.
- Learn about serving sizes of the Food Guide Pyramid.

Time Needed

1 hour

Getting Ready

Read: This lesson plan. Familiarize yourself with the Food Guide Pyramid.

Duplicate: The handouts for this lesson:

Student Handouts: The Food Guide Pyramid; What Counts as a Serving?; Food Group Servings for Children; Seven Ways to Size Up Your Servings

Parent Handouts: Building Healthy Meals & Snacks; Lewis and Clark Fitness Challenge - Build a Healthy Base and Sound Bytes to Help You Build a Healthy Base

Staff Handout: Eating for a Healthy Weight

Have: Work with the food service staff to make measuring cups, spoons, and a scale available to students for Activity 2. Food from each food group is also necessary for this activity (for example, bread or cereal, orange, lettuce, cheese, cold meat - or other to represent all food groups). Also consider bringing portion size props to class for Activity 2, such as a cassette tape to represent 3 ounces of meat, a tennis ball to represent a fruit serving, or four dice to represent a portion size of cheese.

Technology Link: Visit the Beef Association's website at <http://www.beefnutrition.org/> and USDA's Food and Nutrition Information Center at <http://www.nal.usda.gov/fnic/> and the Centers for Disease Control's Nutrition and Physical Activity website at <http://www.cdc.gov/nccdphp/dnpa/>

Lunchroom Link: Hang the student-created poster in Activity 2 in the cafeteria.

Using a school menu, let students compare the portions of each group found in the menus to the Food Guide Pyramid.

Students can also invite food service staff to talk about how they create balanced menus.

Nutrition Lesson 2: "Eating" the Pyramid

Activity Steps

1. What is a healthy diet?

Distribute the "Food Guide Pyramid" handout at the back of this lesson. Allow students time to read it and discuss it. Have them keep it to refer to in upcoming lessons.

Explain that the Food Guide Pyramid represents a balanced diet to help people make healthy eating choices. Students may need some help deciphering the pyramid. The following information can be discussed with them:

- The Food Guide Pyramid shows what a balanced diet looks like.
- Everybody has different needs. The pyramid provides a range of recommendations. Students should understand that their daily food consumption should include at least the minimum number of servings for each of the major food groups.
- The bread, cereal, rice and pasta group is also known as the grain group because all these foods come from grains.

Challenge students to determine which of the major food groups include foods from plants, which from animals. Which food groups does the pyramid recommend more servings from each day? Have students list the key nutrients that each food group provides. (Refer to the Dietary Guidelines booklet used in Lesson 1 for specific information, but keep it simple - vitamins A and C, fiber, and potassium in the fruit and vegetable groups; protein, Vitamin B12 and zinc from the meat group, calcium and Vitamin D from the dairy group; and fiber and B Vitamins from the Grains group.)

Have the students work in teams to think about the foods Lewis and Clark ate on their expedition. Where do these foods fit on the pyramid? Which food groups could they name the most foods for? Did the Expedition get to eat foods from all of the food groups? If not, why? (For example, they may not have had milk to drink if they didn't have a cow along.)

Now have the students list their favorite foods and try to place them in the pyramid. Help them decide where to place combination foods like burritos and pizza.

2. How much is a serving?

Distribute the "What Counts as a Serving?" handout at the back of this lesson. Have students look at the foods they brought into class and estimate how many servings of each they eat at a sitting. For example, if they eat cereal with milk for breakfast, they might estimate that they eat one serving from the grain group and one serving from the milk group.

Divide students into teams and give each team some of the foods brought into class by your food service staff. Students can take turns using measuring cups, spoons, and scales to measure out serving sizes. Then they return to the estimates they made earlier. Ask:

- Would you like to change your earlier estimates?
- How does looking at a serving size help you estimate?
- How can looking at serving sizes help you estimate the number of servings in combination foods?
- Was it easy to meet the minimum number of servings for the food groups? Which ones were easy to achieve? Which were more difficult?

Distribute the "Seven Ways to Size Up Your Serving" handout to students and discuss. Make sure students understand the seven easy ways to determine serving sizes of common foods.

Have students work in teams to make a "Lewis and Clark Food Guide Pyramid" poster using full-scale drawings or pictures of serving sizes of foods that Lewis and Clark would have eaten. Hang this poster in the cafeteria to help celebrate the Lewis and Clark Fitness Challenge and remind all students what a serving size is in each food group.

Nutrition Lesson 3:

Read All About It!

OVERVIEW OF LESSON 3 IN NUTRITION - This lesson allows students to really think about what they eat and keep track of it in a journal, just as Lewis and Clark kept notes about the Expedition in their journals.

Objectives

Students will:

- Learn about writing in a journal.
- Keep a food journal.

Time Needed

1 hour

Getting Ready

Read: This lesson plan.

Duplicate: The handouts for this lesson:

Student Handouts: Sizing Up My Diet; Personal Pyramid; Reporter's Notebook; and The Daily Digest

Parent Handout: Supermarket Sleuths; Lewis and Clark Fitness Challenge - Choose Sensibly and Sound Bytes to Help You Choose Sensibly

Have: Copies of the Lewis and Clark journals for students to read. Go to <http://xroads.virginia.edu/~HYPER/JOURNALS/journals.html>. Extra copies of the Food Guide Pyramid for Activity 1.

Technology Link: Use USDA's Healthy Eating Index website <http://www.usda.gov/cnpp/> where students can determine how they eat according to the recommendations of the Food Guide Pyramid.

Lunchroom Link: Bring in restaurant reviews from newspapers and magazines. Have students read them and discuss what makes a fair review - reasons for every opinion, evaluation of the food, and evaluation of the service and presentation. Let students review lunchroom meals. Have them judge the taste and appearance of the meal and how it meets the serving requirements from the Food Guide Pyramid. To compare, also have students write a review of a "fast food" lunch - such as soft drinks and chips, French fries and hamburger, Extra Value Meals, or any other suggestions they may have which are typical for them or their friends. Use this as a learning experience to point out how nutritious school meals are.

Nutrition Lesson 3: Read All About It!

Activity Steps

1. Keep a Food Diary

Ask students to record everything they eat and drink for a 24-hour period, including snacks, on the "Foods I Ate" handout at the back of this lesson. They should also estimate serving sizes each time they make an entry because it may be more difficult to remember the size of their portions later on. Foods that are not included in the five food groups should be classified as Other Foods. Students can then use the Food Guide Pyramid handout from Lesson 2 to compare their completed worksheets with recommendations. Ask them to evaluate their food habits and choices as they make suggestions for improvement. Poll the class to find the food group(s) in which most of the students ate less than the minimum recommended servings. Students could make a graph, which shows the number of students who ate the minimum number of servings for each food group. Instruct the class to brainstorm, and list on the board or the overhead foods that the students like to eat that would help them get the minimum recommended servings for that food group.

To expand on this further, students should keep a food diary for a week and compare their diets to the Food Guide Pyramid to see if they meet the dietary goals. For every day they meet the goal, they can award themselves a gold star. For days that they improve their diet but don't quite reach their goals, they get a silver star.

2. Food Facts Fit to Print

Working in small groups, students can read sections from Lewis and Clark's journals to get an idea of how to keep a journal. Then ask students to write a newspaper article about the foods that the Expedition ate and the foods that we eat today, using their own food diaries. Remind students that reporters are as factual as possible and to gather facts for their stories they need to investigate their food diaries and Lewis and Clark's journal entries about food eaten. Have students compare the differences in their own diets to what the Expedition ate. They may want to answer these questions:

Where did the Expedition's food come from? Where does my food come from?

How does my diet compare to the Expedition's diet? (use the Food Guide Pyramid to answer this)

How did the Expedition cook their food? How does my food get cooked?

What did the Expedition drink? What do I drink? Which is healthier?

First, ask students to categorize the foods in their diaries according to food group. Remind them that many foods (such as pizza) have a combination of ingredients and therefore include foods from several food groups in the pyramid. Once they have organized the foods by group, ask students to count and record the number of servings they ate from each group. The handouts - "Reporter's Notebook" and "The Daily Digest" - at the back of this lesson will help students organize their notes into a story. Once students have completed their articles, they can bind the pages together to create a class edition of *The Daily Digest*.

Nutrition Lesson 4: Native American Foods

OVERVIEW OF LESSON 4 IN NUTRITION – Diversity is the spice of life, and foods offer us all a marvelous way to sample and enjoy the rich ethnic diversity of the world. In this lesson, students will have the opportunity to hear about, see and taste some of the Native American foods eaten on the Expedition that are still eaten today by Native Americans in Montana.

Objectives

Students will:

- Learn about foods eaten by Native Americans during the time of the Expedition and also foods eaten by Native Americans today.

Time Needed

1 hour

Getting Ready

Read: This lesson plan.

Duplicate: The handouts for this lesson:

Student Handout: Native American Foods

Parent Handout: Comfort Foods for the Soul

Have: Copies of entries from Lewis and Clark's journals regarding Native American encounters and foods eaten. Go to <http://xroads.virginia.edu/~HYPER/JOURNALS/journals.html>. Chapters 17 and 18 talk about an antelope hunt, making pudding, salmon and dried berries.

Technology Link: Native American Recipes at <http://www.recipesource.com/ethnic.americas.native>

Native American culture at <http://www.ewebtribe.com/NACulture>

Native American foods at <http://indy4.fdl.cc.mn.us/~isk/food/recipes.html>

Native American history at <http://encarta.msn.com/encnet/refpages/RefArticle.aspx?refid=761570777>

Ojibwe stories at <http://www.kstrom.net/isk/stories/stories.html>

Lakota stories at <http://www.historychannel.com/exhibits/sioux/>

Lunchroom Link: Have a tasting party of typical Native American foods. Hang posters in cafeteria, which students make in Activity 1.

Nutrition Lesson 4: Native American Foods

Activity Steps

1. The Foods of the Native Americans

Have students read journal entries from the Expedition about the Corps of Discovery's encounters with the Native Americans. How many different tribes did the Expedition run into? Have students split into teams and research the various tribes, then report back to the class their findings. Make sure the students find out what Lewis and Clark ate with the Native Americans. Do some of the students eat these foods at home? Can they think of other foods the Native Americans might have eaten? How do these foods fit into the Food Guide Pyramid? Pass out the handout at the back of this lesson, which lists foods eaten by Native Americans. Let students circle the foods their families now eat.

Students can then make various posters displaying each of the different Native American tribes Lewis and Clark encountered. Display these posters in classrooms, the lunchroom or hallway walls.

2. The Local Speaker

Next, invite a local Native American to come in to the classroom and talk with the students about traditional Native American foods and life. Do they still eat these foods in their homes today? How do they prepare their food? What are some traditions they still practice in association with eating? Encourage the students to ask questions and have the guest help the students create a typical Native American menu (which may be used in Lesson 8 - The Feast of the Mandans).



Nutrition Lesson 5:

Montana Made

OVERVIEW OF LESSON 5 IN NUTRITION - Grain-based foods provide complex carbohydrates, which are an important source of energy for the body. They also provide vitamins that help keep the body strong and healthy, such as B vitamins, minerals such as iron, and dietary fiber, which keeps the digestive systems healthy. In this lesson, students will get to taste different foods made from grains grown in Montana and write a cookbook of local recipes.

Objectives

Students will:

- Learn about Montana grown grains, some of which were eaten along the trail on the Expedition.

Time Needed

1 hour

Getting Ready

Read: This lesson plan.

Duplicate: The handouts for this lesson:

Student Handouts: My Family's Recipe; Grains Grow in these States and answer key

Parent Handout: Gardening Together

Have: For activity 1, have a map of the United States handy with names of states visibly marked. Samples of various types of breads also for Activity 1. Suggestions would be wheat bread, rye bread, corn tortilla, pita bread, flour tortilla, scone, cracker, English muffin, oat bread and rice cakes. For activity 2, check the library for cookbooks of Native American foods and pioneer foods (see suggestions under Nutrition Resource page listed after the last Nutrition Lesson Plan).

Technology Link: Contact the Wheat Council at www.wheatfoods.org or www.smartbread.com

Also contact the US Rice Foundation at www.ricecafe.com or the Montana Department of Agriculture at www.agr.state.mt.us

Lunchroom Link: Food service staff may prepare some of these "trail" foods for in-school or after-school snacks.

Nutrition Lesson 5: Montana Made

Activity Steps

1. The Great Montana Plains

The Great Plains of Montana provides ideal growing conditions for a variety of grains, namely wheat. Many students in rural areas of the state may know a great deal about the planting and harvesting of grain, but other students may not. Students who live on a farm may want to participate in this activity by inviting a family member to the classroom to talk to the class about farming.

To teach a bit of geography, display the "Grains Grow in These States" handout at the back of this lesson. Have the students name the states where grains are grown. Where are the most grains grown? Why? Which states would Lewis and Clark have traveled through on the Expedition? What foods might they have eaten which were grown with these grains?

To end this activity, tell students that now they can taste some foods made from different grains. Have everyone wash his or her hands. Someone can help distribute cups of water and paper plates or napkins. Students can take a sample from each food plate (you may use the food examples listed on the previous page under Have), taste the food and try to figure out which grain it's made with. Have volunteers name each food and its grain ingredient.

Ask students: which food did you like best? Why? Which were new to you? Do you know what happens to a grain when it is processed? Did you know that whole grains (like whole wheat and oatmeal and whole rye) are healthier for you than more processed grains (like white bread)? That is because during processing, the bran and the wheat germ are not removed from the grain. These parts of the plant provide fiber and vitamins and are healthy for you to eat. Think of some ways you could serve these grains in a meal - tuna salad in a pita, oatmeal with raisins.

2. What the Locals Eat

Food is important to us all, and students may be surprised to find that family members have foods they associate with cherished memories. For this activity, have students interview family members or friends about foods or recipes that are important to them. Do they cook any special meals at celebrations? Do they have a recipe that they associate with a grandparent or an important event?

Ask students to choose one food to represent their family or culture, and find the reason for its importance. If family members don't know the recipe, students can look for it in cookbooks at the library. Encourage them to find out as much as they can about the food and its history and include that with the recipe. Distribute the "My Family's Recipe" handout at the back of this lesson. Students illustrate their recipe and write a few sentences about its importance to them. The class can share its stories and recipes and create a multicultural recipe book. Be sure to include some Montana-grown grain-based recipes! This recipe book can be photocopied and bound so that each student can have a copy to take home. You may also want to consider selling the cookbook during school fundraisers or at the end of Lesson 8 - The Feast of the Mandans.

Students can also include recipes from the Expedition. To do this, they may want to look for recipes in Native American cookbooks or pioneer cookbooks (see Nutrition Resource page at the end of this program).

Nutrition Lesson 6:

Food Grows

OVERVIEW OF LESSON 6 IN NUTRITION - Lewis and Clark and the Corps of Discovery would likely have eaten a great deal of food from the Fruit and Vegetable groups. Many fruits and vegetables grow wild and would have provided the Expedition with needed calories and other important nutrients. In this lesson, students will learn about what makes fruits and vegetables such an important part of their diets and will make a fun snack to enjoy fruits and vegetables.

Objectives

Students will:

- Learn about the benefits of fruits and vegetables and tasty, easy ways to enjoy them throughout the day.

Time Needed

1 hour

Getting Ready

Read: This lesson plan.

Duplicate: The handouts for this lesson:

Student Handouts: We Eat Different Parts of the Plant; Salad Bowl; Grain, Fruit and Veggie Challenge; and Edible Art

Parent Handout: Roots, Stems, Leaves, Fruits, Flowers and Seeds

Have: Samples of Lewis and Clark vegetables and fruits which students circled from the "We Eat Different Parts of the Plant" handout.

Technology Link: www.5aday.com and www.nhlbi.nih.gov/hbp/prevent/h_eating/h_eating.htm

Lunchroom Link: Cafeteria staff can challenge students to eat their way through a Five A Day Challenge using the "Grain, Fruit and Veggie Challenge" handout at the back of the lesson. To encourage students to take fruits, vegetables and grains from the lunch line, food service staff can set or hang brightly decorated place cards by these foods with the name of the food on it and identifying it as fruit, veggie or grain. Make sure students know that if they take this food, they can check off a box on their Challenge sheets. Hang posters in the cafeteria encouraging students to eat more of these foods. Also consider having a "New Fruit Day" or "New Veggie Day" one day each week to introduce students to a variety of foods. Encourage students to try something new and exciting! Consider seasonal fruits and veggies like kiwi, star fruit, jicama, blood orange, ruby red grapefruit, etc.

Nutrition Lesson 6: Food Grows

Activity Steps

1. Roots and Things

Fruits and vegetables supply the body with water, vitamins such as vitamin A and vitamin C, minerals such as potassium and calcium, and carbohydrates for energy. Fiber, which keeps the digestive systems healthy, is also found in fruits and vegetables. The different parts of plants that can be edible are the seeds, roots, leaves, stems, flowers and fruit. Have students read the "We Eat Different Parts of a Plant" handout and become familiar with this list of fruits and vegetables before the lesson. Also have them think about the fruits and vegetables that Lewis and Clark ate. From the list on the handout, students should decide which foods Lewis and Clark may have eaten and circle these foods.

Place plates of bite-sized samples and whole foods on a table. Make sure to include some of the Lewis and Clark foods as well as new foods for students to try. Have students wash their hands. Have someone distribute paper plates and napkins. While students try the different foods, they should think of the name of each food as well as what part of the plant it is - for example, celery is the stem of a plant. Let students refer to the handout to help them identify the parts of the plant they are eating.

Have everyone taste the same food at the same time. After students taste a food, discuss the following:

Do you know what fruit or vegetable you just tasted?

How would you describe the food? Was it soft? Crunchy? Sweet? Etc.

Do you eat it at home? What do you like to eat with this food? (cheese with broccoli, etc.)

How would you see this food fitting into your meals?

Have you seen or tasted this food in different forms? (apples - apple slices with peanut butter, apple juice, applesauce, dried apple slices, etc.)

After food samples have been tasted and identified, open the discussion on how Lewis and Clark may have eaten these foods on the Expedition. Did they cook them? Eat them raw? Where might they have found them? (in a tree or bush, as a root, etc.) This can lead into discussing plant parts. Using their handouts, let students answer the following questions:

What part of the plant do you think (Sample A) comes from?

How did you know that? (Some vegetables are leafy so they come from that part of the plant)

Using the handout, have students draw a line connecting the name of the plant part to the part of the plant it names. Ask students:

Do you eat any other fruits or vegetables from this part of the plant?

Were there any fruits or vegetables that were new to you today?

Distribute the "Salad Bowl" handout and have students circle the fruits and vegetables they eat on the list. Using the "Grain, Fruit and Veggie Challenge" handout, challenge them to select a new food to try each week and to meet the goals of eating at least 6 servings from the Grain group, 2 servings from the Fruit group and 3 servings from the Vegetable group everyday. Have students include their families in the challenge.

2. Edible Art

Using the leftover fruit and toothpicks and the handout "Edible Art", have each student construct his/her own edible art for a snack at the end of the lesson.

*Also available is a "Five A Day Bingo" game. See the order form at the back of this lesson for further information.

Nutrition Lesson 7:

The Great Nutrition Adventure

OVERVIEW OF LESSON 7 IN NUTRITION – Snacks are an important way to keep your body fueled all day long. Help students to think of snacks as “mini-meals,” made up of the same kinds of nutritious food that you eat at breakfast, lunch and dinner. With all the hard work the Expedition did everyday hiking and canoeing, snacks would have been an important part of giving them enough energy to complete these tasks. In this lesson, students will get a chance to prepare some snacks and think about what makes up a healthy snack.

Objectives

Students will:

- Learn about the importance of healthy snacks.
- Prepare some snacks which were eaten on the Expedition.

Time Needed

1 hour

Getting Ready

Read: This lesson plan.

Duplicate: The handouts for this lesson:

Student Handouts: On Your Own – Making Smart Food Choices; Nutrition at Home – Super Snacks; Nutrition to Go – Super Snacks; Dog Bones

Parent Handout: Pyramid Snacks

Have: Students bring in their copies of the Food Guide Pyramid from Lesson 2.

Technology Link: Contact the Centers for Disease Control for links and data at www.cdc.gov/nccdphp/cvd The USDA Center for Nutrition Policy and Promotion looks at the complex relationship of added sugar intake and the diet quality of Americans at www.usda.gov/cnpp/Insights/Insight21.PDF

Lunchroom Link: Cafeteria staff may be able to supply foods/beverages for this activity.

Nutrition Lesson 7: The Great Nutrition Adventure

Activity Steps

1. A Wise Choice

Distribute the "On Your Own - Making Smart Food Choices" handout to students. Explain that snacks are an important way to keep our bodies fueled all day long. Students should think of snacks as "mini meals" - a healthy snack should include a serving from at least two food groups, such as cheese and crackers, peaches and yogurt, string cheese and carrots. Talk about the healthy snacks students enjoy and the times of day they are most likely to eat snack foods. Have students use the Food Guide Pyramid from Lesson 2. Instruct students to listen to the following scenario and answer the following questions on a piece of paper, then discuss their answers.

Monique was very hungry when she came home from school. She had the choice of eating a doughnut or a burrito. She chose the burrito. She spread beans on a tortilla, and then she added chopped lettuce and tomatoes, grated cheese and hot sauce.

Ask the students: What requirements from the Food Guide Pyramid were met when Monique ate the burrito for a snack? (one serving from the Grain group, one from the Meat/Bean group, two from the Vegetable group, and one from the Dairy group) Why was Monique's choice of a burrito over a doughnut the wiser choice? (It provided vital nutrients and met two food group servings.) What are other hearty snacks that can help meet the nutritional requirements? Distribute the Super Snacks handouts and have students read through them. Discuss different ideas.

2. Dog bones for Seaman

Ask students what they think Lewis and Clark may have snacked on during the expedition. Did they have access to foods we have today? Have students think about the many processed and convenience foods we have readily available to us today. While these foods may be okay to eat sometimes, they should not be eaten everyday. How has snack food changed since the 1800's?

While purchasing supplies for the Corps of Discovery, Captain Meriwether Lewis bought a full-grown Newfoundland dog in Pittsburgh for \$20 and named it Seaman. Seaman accompanied Lewis everywhere. He made it from St. Louis to the Pacific Ocean and back, 8,000 miles, suffering the same bad food, bugs and danger as the rest of the Expedition. Help the students make "dog bones" for Seaman, using the recipe at the back of this lesson. Ask the food service staff to deliver milk and a fruit or vegetable to go with this snack.

Nutrition Lesson 8:

The Feast with the Mandans

OVERVIEW OF LESSON 8 IN NUTRITION - Lewis and Clark arrived at the Mandan Village after the killing frost. The Indians had already harvested and dried beans, corn, squash and various roots. Once dried, the food was stored in large storage holes, called caches, dug into the dirt floors of the earth lodges and in the paths between the lodges. The stores of dried food would nourish the people during the cold months, and it was with these reserves that the Mandan and Hidatsa people helped the Expedition survive the tough North Dakota winter - temperatures would drop to forty-five degrees below zero. On New Year's Day, Lewis and Clark and their men traveled from village to village, dancing to Cruzatte's fiddle, entertaining the Indians and ringing in 1805. This lesson will allow students to create and enjoy a feast and celebrate Indian culture and foods eaten during the expedition.

Objectives

Students will:

- Learn about Native American culture and celebrations.

Time Needed

1 hour

Getting Ready

Read: This lesson plan.

Duplicate: The handouts for this lesson:

Student Handout: Invitation to Our Food Fair

Technology Link: For a *Lewis and Clark Among the Indians* study guide, go to <http://jan.ucc.nau.edu/~maa8/ronda.htm> or for resources on every aspect of American Indian life and culture, go to the Index of Native American Resources on the Internet at <http://hanksville.phast.umass.edu/misc/NAresources.html>

Lunchroom Link: Students and food service staff can decide how to decorate the lunchroom to make it look more like an Indian village for the day of the feast. Work with food service staff to coordinate a date and foods to be prepared for the feast.

Nutrition Lesson 8: The Feast with the Mandans

Activity Steps

1. Planning the Feast

Students can begin by brainstorming the most appropriate site for the feast (the cafeteria, the gym, the school yard, or auditorium). Have students vote on a site once they have discussed all the options.

Next, have students come up with a name for their feast. What title captures the spirit of this celebration? Take suggestions and have the class vote to find the favorite.

Students will also have to decide whom to invite. The lunchroom staff, teachers, family and other students will certainly enjoy this celebration! Use the handout at the back of this lesson for invitations. Students can also write invitations or design flyers advertising the celebration.

Remind students that most Native American celebrations include dancing, songs and music. They will want to consider inviting a group of Native Americans who can dance, sing and play traditional music for the celebration, or look for a CD of Native American music heard at pow wows. Students may also want to "dress up" in Expedition-style clothing.

Also have students decide what foods to serve at their fair. Have them work in teams to plan a menu based on what they have learned about nutrition and what foods the Corps of Discovery would have eaten on the expedition. Use the handout from Lesson 4 - Native American Foods, or the menu they created in Lesson 4. Also consider borrowing Native American cookbooks from the library or from the Montana Team Nutrition Program (list available at the end of this program). Have the class work together on the final menu so no teams duplicate a recipe. The menu should then be turned in to the food service staff at least a month prior to the celebration so they have plenty of time to plan and prepare for the feast. Also invite parents to get involved with planning this feast.

2. Time to Celebrate!

When all the planning and preparation is complete, it's time to celebrate! Students can help set up booths or tables and decorate as they decided earlier. Help food service staff in any way needed. Set out copies of the cookbooks students created in Lesson 5. Consider selling them to help cover any extra costs for the celebration. Prepare to sing, dance, eat and have fun! Don't forget your costumes!

